



VIRGINIA • PEDIATRICS

American Academy of Pediatrics • Virginia Chapter

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We strongly encourage you to reach out to your legislators during the summer and fall *before legislation session* to inform them of the priorities for pediatrics and child health.

About Us

AAP-VIRGINIA Chapter

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2019 Annual Leadership Forum Top 10 Resolutions

The Annual Leadership Forum (ALF) is attended by chapter presidents, chapter vice presidents, nationally appointed committee chairpersons, council chairpersons, section chairpersons, guests, and chapter/national staff. One of the aims of the ALF is to draw upon multiple areas of expertise within the American Academy Pediatrics (AAP) to advise and make recommendations to the Board of Directors. The Virginia Chapter, AAP leaders who attended the ALF this year worked with other state chapters to select the Top 10 resolutions that they felt were of the utmost importance to the membership of the Academy.

At the close of the voting at the 2019 ALF the following were voted the top 10 resolutions:

	Resolution #	District	Title
1.	4	III	Eliminating Non-Medical Exemptions to Vaccinating Children
2.	39	I	Family Separations at the Boarder; Safeguarding Children's Health
3.	16	III	Limitation of Prior Authorization Requirements for Medications
4.	23	IV	Continuity of Medicaid Benefits When Recipient Move
5.	11	I	Access to Evidence-Based Treatment for children and Adolescents with Neurodevelopmental Disorders Beyond Autism
6.	22	X	Affordable Insulin Access for All Children with Diabetes
7.	32	II	Revising the AAP Bright Futures Guidelines on Gun Safety Anticipatory Guidance
8.	30	IV & VII	Drowning Prevention Recommendation Statement and Education
9.	25	VI	Providing Guidance on School Response to E-Cigarette Use by Students
10.	8	II	Public Education About Intramuscular Vitamin K Administration at Birth

Look to <http://bit.ly/2JhLDXI> and the May issue of AAP News for more on the top 10 resolutions and the 2019 ALF.

"Given the measles outbreaks, prioritizing the elimination of non-medical vaccine exemptions is a timely undertaking."

- AAP President Kyle E. Yasuda, M.D., FAAP



President's • MESSAGE

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Sandy L. Chung, MD, FAAP, FACHE

President Virginia Chapter, American Academy of Pediatrics

Your Virginia Chapter of the AAP continues to be very busy advocating for children, child health, and pediatricians. Since my last message, the General Assembly of Virginia convened and considered multiple legislative bills. We had many successes and few challenges related to legislation this year. **Our biggest success was funding for the Virginia Mental Health Access Program (VMAP)**, a program spearheaded by the Chapter to improve access to mental health care for children and adolescents.

This program has four major components:

- 1.) Education and training of primary care providers on screening, diagnosis, management and treatment of mental health conditions such as ADHD, depression and anxiety. This comes in the form of REACH programs, Project ECHO, and QI projects (with MOC Part 4 credit!).
- 2.) Telephonic consult service to Child Psychiatrists where primary care providers can call and consult a child psychiatrist.
- 3.) Telepsychiatry/telepsychology where patients who need a face-to-face visit with a mental health provider can receive that remotely via televideo.
- 4.) Care Navigation where practices connect patients to Care Navigators who can help families who need help finding mental health resources, such as appointments with mental health providers, support groups, social service needs.

Other legislative successes/changes included bills that:

- Increased the age for the purchase of tobacco to age 21
- Increasing the age for coverage of autism service coverage from 10 years to any age
- Moving the onus of notifying patients that Lyme disease testing is not completely reliable from the clinicians to the laboratory
- Screening for congenital CMV in newborns who fail the newborn hearing screen

Items that we will have to continue to work on include: Increase Medicaid rates for pediatricians (the bill that was passed increased rates to 70% of Medicaid for ADULT primary and preventative care and emergency care). Protecting essential health care benefits in new types of insurance plans such as short-term, limited duration plans and association health plans. Legislation to protect children from gun violence by providing retail tax exemption for gun safes. Protecting reimbursement for specialists who see patients emergently in the hospital if they are out of network for that patient's insurance plan.

Every year, it is a whirlwind of activity during legislative session. **We strongly encourage you to reach out to your legislators during the summer and fall before legislation session to inform them of the priorities for pediatrics and child health.** Thank you to everyone who helped this past session, we should be proud of what we accomplished!

Sandy Chung, VA-AAP President | schung@fairfaxpeds.com

Pictured from left to right:
VA-AAP Executive Board of Directors Jane Chappell, Executive Director, Kristina Powell, MD Secretary/Treasurer, Sandy Chung, MD, President, Barbara Kahler, MD, District IV Chapter Forum Management Committee (CFMC) Representative and Michael Martin, MD Vice President



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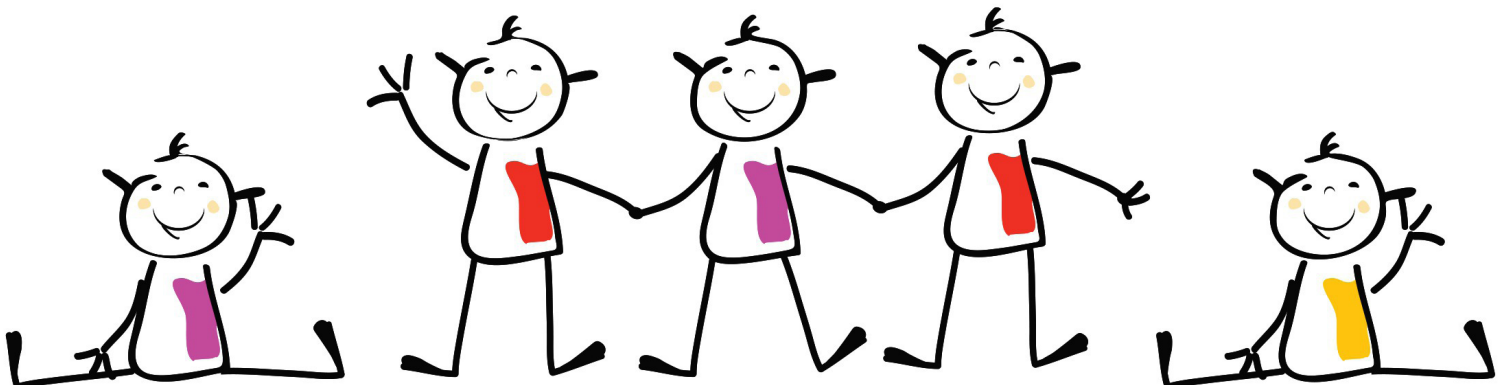
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Disclosures:

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Appropriate Use of Antibiotics in Children with Chronic Respiratory Symptoms

W. Gerald Teague, MD

Ivy Foundation Distinguished Professor of Pediatrics

Chief, Division of Respiratory Care, Allergy, Immunology, and Sleep

Department of Pediatrics | University of Virginia School of Medicine

Objectives: The reader will 1) understand the indications and contraindications for azithromycin in the acute treatment of exacerbations of problematic wheeze in preschool children, and 2) adopt recent practice guidelines advising treatment with amoxicillin/clavulanate in children with protracted bacterial bronchitis syndrome.

ACGME Competencies: Patient care, Medical Knowledge



The Challenge

In 2015 the CDC estimated 30% of the 269 million antibiotic prescriptions dispensed from out-patient pharmacies in the US were unnecessary¹. Risks of inappropriate antibiotic use in children include allergic reactions and the development of drug-resistant bacterial pathogens. For years pediatricians have been advised to not treat lower respiratory symptoms associated with asthma or bronchitis in the absence of a clear bacterial source. The Global Initiative for Asthma Guidelines state “evidence does not support a role for antibiotics in acute exacerbations of asthma unless there is strong evidence of lung infection such as fever, purulent sputum, or radiographic evidence of pneumonia.”²⁴ Such guidelines are often difficult to maintain in practice, due in part to the anxiety parents and providers face in the setting of a febrile child with lower respiratory symptoms and the expectation from care givers that an antibiotic will be prescribed.

Gap in Knowledge

The prevalence of lower respiratory pathogens in children with chronic respiratory symptoms diagnosed as problematic wheeze or asthma is poorly understood, in part due to the difficulty in obtaining adequate specimens for study.

Prevalance of Incidental Lower Respiratory Pathogens in Children with Chronic Respiratory Symptoms

Children referred to the UVA Division of Pediatric Respiratory Medicine with either

problematic wheeze ($n = 184$) or severe asthma ($n = 187$) refractory to standard treatment have diagnostic bronchoalveolar lavage (BAL). BAL fluid is tested for 14 respiratory viruses and bacterial cultures. BAL is postponed in children with symptomatic respiratory infections. Detection of virus is common, found in 86 (47%) of preschool children and 41 (22%) of older children ($p < .0001$). Human rhinovirus is the most common

virus identified (85%), and decreases with advancing age (41% preschool versus 16% older children; $p < .0001$). Pathogenic bacteria are also commonly cultured, found in 57 (31%) preschool and 25 (13%) older children ($p < .0001$). Prevalent bacterial species are *Moraxella catarrhalis*, *Hemophilus influenzae*, and *Streptococcus pneumoniae*. Thus young children with problematic wheeze often harbor incidental viral and bacterial species in the lower respiratory tract. Furthermore these species confer BAL granulocytosis; eosinophilia in the case of rhinovirus, and BAL neutrophilia with bacteria⁶. In a subgroup with severe asthma, we describe a novel endotype with chronic wet cough, BAL neutrophilia, and positive bacterial cultures.

Treatment of Acute Episodes of Problematic Wheeze with Azithromycin

Recent evidence supports azithromycin treatment for acute episodes of preschool wheeze as an alternate to oral prednisone³. In a clinical trial published in JAMA, preschool children with a history of recurrent wheeze episodes were treated with five days of azithromycin or placebo at the first sign of a viral respiratory infection. Azithromycin treatment significantly reduced the progression of respiratory symptoms compared to placebo, not only with the first cold but for subsequent colds over the study period. In another trial, azithromycin therapy during RSV bronchiolitis reduced the probability of recurrent wheeze during the

subsequent year by approximately 50%⁴. The beneficial effects of azithromycin in both studies were attributed to its inhibition of IL-8 and neutrophil immigration, however an antibacterial effect could not be ruled out given the known association of wheeze episodes with respiratory bacterial infection⁵. Based on these provocative findings, primary care pediatricians can consider treatment of acute wheeze episodes in preschool children with a known history of recurrent wheeze with five days of azithromycin, 10 mg/kg per day, being careful to avoid children at risk of long QT syndrome. In follow up studies, the emergence of azithromycin-resistant pathogens has not been found in children enrolled in the JAMA study.

Overlap Syndrome of Severe Asthma with Protracted Bacterial Bronchitis: Indications for Antibiotic Therapy

Over a decade ago, children with chronic cough not explained by asthma or other known causes of cough were recognized as having “protracted bacterial bronchitis syndrome (PBB).”⁶ Children with PBB had airway neutrophilia and an associated endobronchial bacterial infection. The cough resolved with two weeks of amoxicillin/clavulanate therapy in 48% of affected children compared to 16% resolution with placebo⁷. The natural history of PBB is largely unknown, at least one long-term study suggests it can progress to suppurative lung disease with bronchiectasis⁸. We find based on our studies that a sub-group children who fit criteria for severe asthma have BAL neutrophilia and positive BAL cultures for pathogenic bacteria. Among 102 children studied with asthma and BAL neutrophilia, 40% have a positive BAL bacterial pathogen identified, and over 2/3 of these children are non-atopic⁹. Do these children have poor mucociliary clearance and harbor biofilms of pathogenic bacteria on the airway mucosal surfaces? We find no difference in the proportion with absent ciliary motion based on bacterial culture status, and no difference in the % of exfoliated epithelial cells in BAL. In our practice, children with positive BAL bacterial cultures and neutrophilia are treated with fourteen days of amoxicillin/clavulanate, followed

by maintenance azithromycin 10 mg/kg per day on Monday, Wednesday, and Friday for eight weeks. In follow up, we find that most have improved asthma control, and high dose corticosteroids often can be weaned. However these steps cannot be considered as strong evidence until it is validated by a placebo-controlled study.

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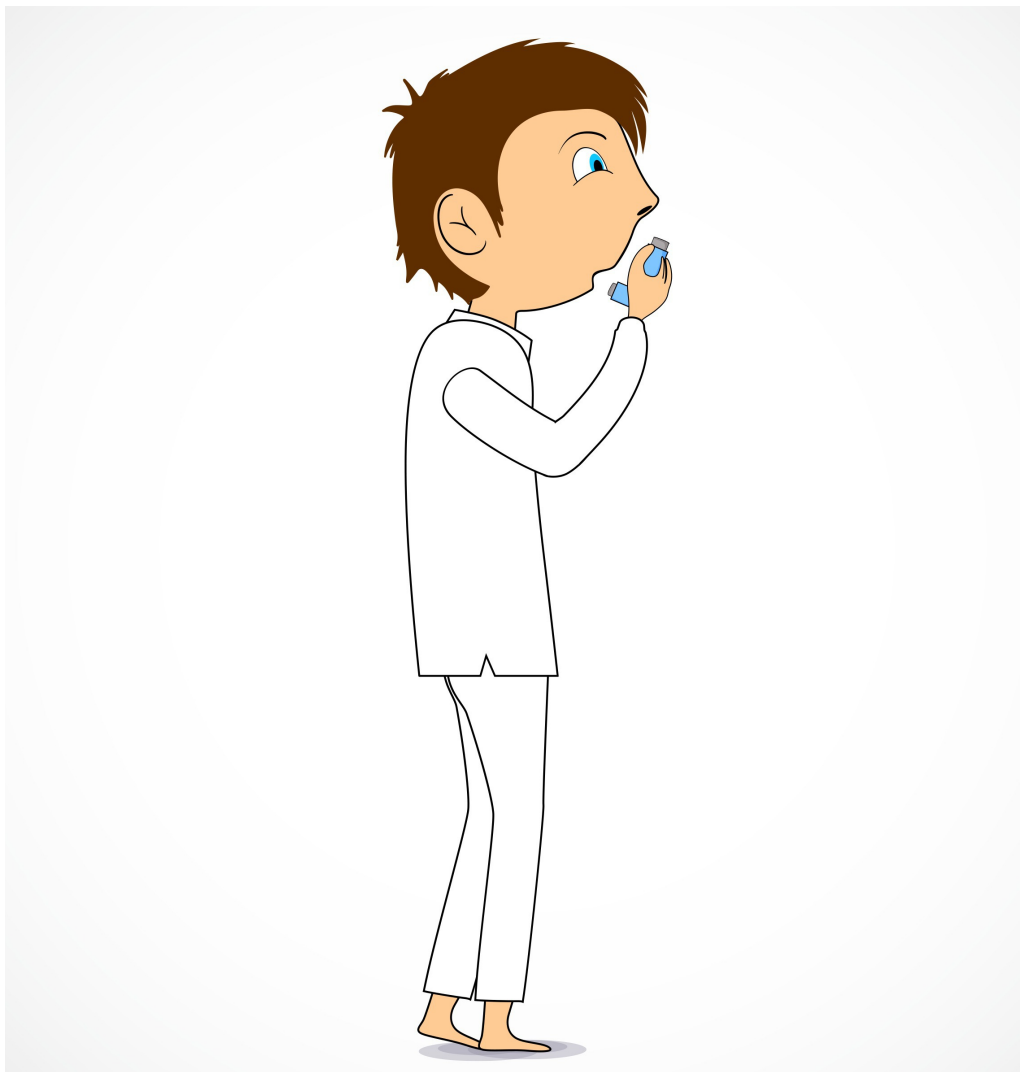
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Disclosures: This work funded in part by NIH/NHLBI Severe Asthma Research Program U10HL109250-07



Finding Answers After an Unexpected Sudden Death to Prevent More Suffering

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Objective: The reader will be able to explain the role of a cardiovascular genetic counselor following an unexpected sudden death with a focus on protecting the surviving at-risk family members through cardiovascular screening and postmortem genetic testing.

ACGME Competencies: Patient Care; Medical Knowledge



When a healthy child dies suddenly and unexpectedly, it is a tragedy for the family, the child's pediatrician and the community at large. Following such a devastating loss, parents often ask their pediatrician what they need to do to make sure that their other children and/or future children will be safe. The largest prospective, population-based study of sudden death in the young found that 1 out of 3 deaths were the result of an inherited or likely inherited heart disease.¹ As a cardiovascular genetic counselor, one of my critical roles is to help these families try to find answers about what caused the sudden death and provide a plan to protect the surviving family from it ever happening again.

The initial evaluation after a young person unexpectedly dies most often lies in the hands of a medical examiner or coroner. After histologic and toxicologic studies are complete, the assessment is summarized in an autopsy report that is typically available a few months after the death. When the cause of death is found by autopsy, it offers an explanation to the parents and pediatrician and provides guidance on what screening, if any, may be needed for the surviving family. For example, if left ventricular hypertrophy and myocyte disarray are found on an autopsy that is suggestive of hypertrophic cardiomyopathy, then echocardiogram and EKG screening would be indicated in at least the decedent's siblings and parents.

However, even the most comprehensive and advanced autopsy cannot find the cause of death an estimated 40% of the time. This is where postmortem genetic testing has the potential to offer meaningful and actionable answers.

Postmortem genetic testing, also known as the molecular autopsy, is DNA analysis designed to find the cause of an unexpected and sudden death of a young person at a molecular level, even if there is no physical evidence of disease on the autopsy. This testing focuses on genes linked to inherited arrhythmia, cardiomyopathy and epilepsy conditions. The aforementioned prospective study of premature sudden death found that 27% of decedents with a normal autopsy had diagnostic genetic testing that explained or likely explained the sudden death.¹

Although postmortem genetic testing has been an option for two decades, access to testing has been limited for three major reasons:

- 1) the cost of testing,
- 2) the lack of a sample to test, and
- 3) a lack of awareness that this testing is an option. Fortunately, most of these limitations have been addressed in recent years.

First, the cost of genetic testing for conditions that predispose to sudden death have dropped from thousands of dollars to a few hundred dollars, due to technology advances and laboratory competition. Second, the National Association of Medical Examiner's (NAME) released a position paper in 2013 recommending for medical examiners and coroners to preserve appropriate blood samples for postmortem genetic testing after an early unexpected death.² Although TV shows have people believe genetic testing can be performed on a single strand of hair or a used toothbrush, the requirements of medical-grade genetic testing differ greatly from forensic analysis. Postmortem genetic testing is most successful when performed on a refrigerated or frozen blood sample drawn by the medical examiner. Fortunately, DNA remains stable for months, or even years, if the sample is properly stored. Finally, awareness of the value of the medical autopsy has improved, yet many families still do not know of this option in time to take action.

If genetic testing is performed and finds the disease-causing gene variant responsible for an unexplained sudden death, the next step is to offer genetic testing to surviving family members. *There will be two possible outcomes of this family testing:*

- 1) Those who test positive are either affected or at risk of being affected in the future, and need ongoing cardiology surveillance and management. Fortunately, the vast majority of inherited heart diseases have risk-reducing interventions available (e.g. ICD placement for high-risk cardiomyopathy patients, beta blocker therapy in long QT syndrome). The key for saving the lives of patients with these disorders is making the diagnosis in a timely manner.
- 2) Family members who test negative are considered to be at low risk as long as their baseline cardiology evaluations are normal. This is the best-case scenario for the family and allows them to avoid unnecessary worry and unneeded cardiology testing.

Even when genetic testing is negative, inconclusive or unavailable, the surviving family members can still be protected. After a sudden death, the close blood relatives need cardiovascular surveillance to ensure they are not asymptomatic for a treatable inherited condition. The same prospective study of sudden death found an inherited heart disease in 13% of the surviving close relatives who underwent cardiology evaluations even after genetic testing was negative or inconclusive.¹

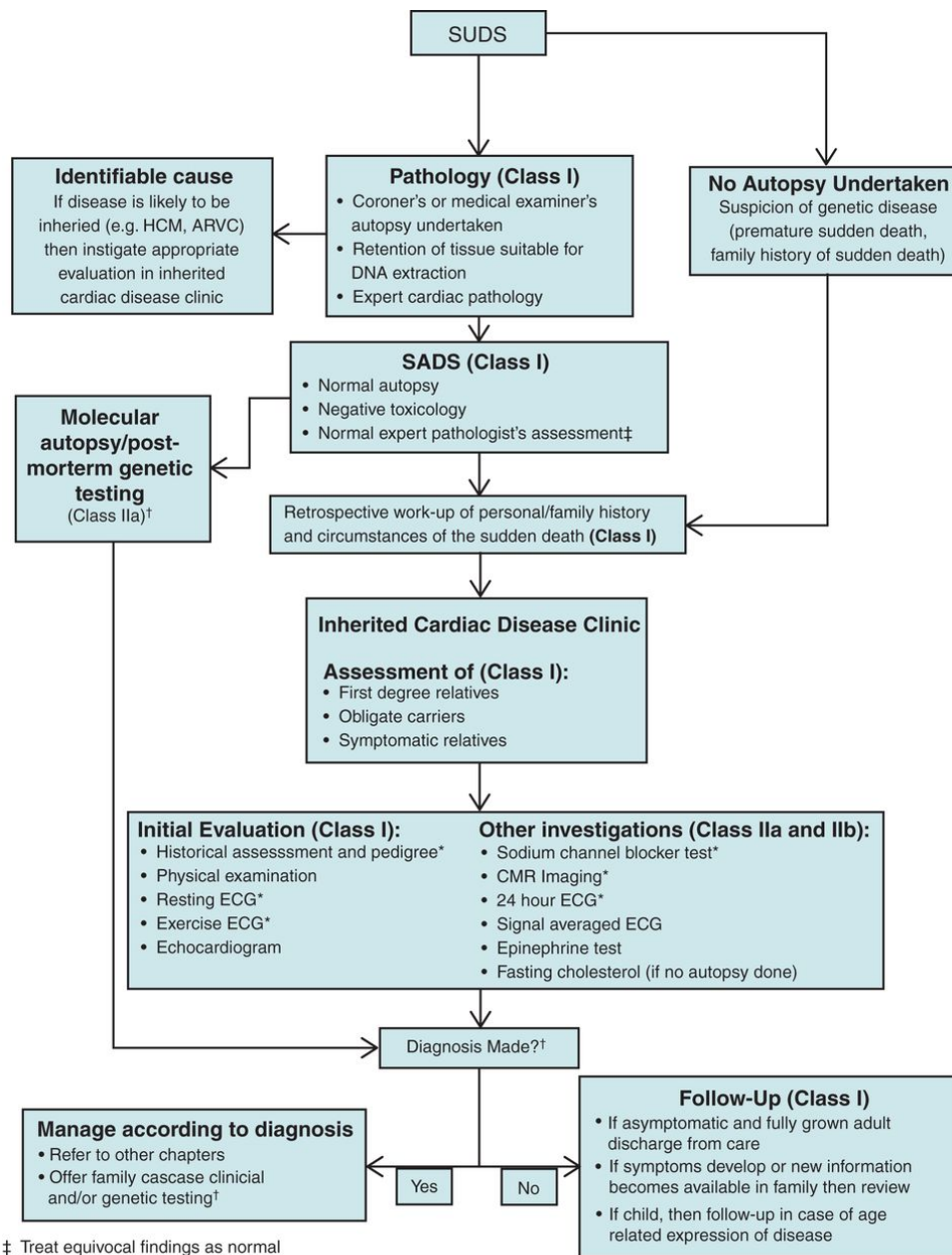
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Serving as a cardiovascular genetic counselor for families after a sudden death, I take on multiple roles that I navigate with sensitivity and compassion given the grief and loss the family is experiencing. I retrieve records from the decedent's prior physicians and from the medical examiner's office. If a sample is available at the medical examiner's office, I coordinate its transfer to the genetic testing lab and help make the testing as affordable as possible. When genetic testing finds an answer, I will coordinate targeted genetic testing to the at-risk family. When genetic testing does not find the cause, I am able to facilitate the appropriate cardiology surveillance for those are or may be at risk, including the parents, as I am embedded in both adult and pediatric cardiology clinics.

The Heart Rhythm Society and two other international electrophysiology groups jointly released guidance for evaluating a family following a sudden unexpected death, which is summarized in the algorithm below.³

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‡ Treat equivocal findings as normal

† Refer to HSR/EHRA Genetic Testing recommendations

* Investigations with greatest yield

VA-AAP Newsletter Registration and Evaluation Form

(Spring 2019)

8

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THE UNIVERSITY OF VIRGINIA/CHILDREN'S HOSPITAL OF THE KING'S DAUGHTERS JOINT CONGENITAL HEART SURGERY PROGRAM

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UVA/King's Daughters Children's Hospital
Congenital Heart Surgical Collaboration



Congenital heart disease occurs in almost 1% of all births, and approximately a quarter of these babies will require heart surgery. Thankfully, current surgical repair methods, support technologies, and quality improvement programs allow the large majority of surgical candidates to survive their operations and most to live normal lives. But the need to maintain a very high level of surgical excellence, paired with outstanding support services, requires a very high performance standard, and this high standard requires experience and surgical volume.

In recognition of the need to maintain both a high standard and a high volume, Children's Hospital of The King's Daughters in Norfolk and the UVA Children's Hospital in Charlottesville merged their congenital heart programs in 2016. The program allows children born anywhere in Virginia to access the combined program at either institution. From that entry point, patients and their families have access to outstanding cardiologists, who diagnose the defect and map out the plan of care. When appropriate, patients are referred to the program's cardiac surgeons, who, working closely with the family and the cardiology team, recommend whether and how to repair the defect, and decide on where to perform the operation. Regardless of the location of the surgery, the program assures outstanding surgical, anesthesia, imaging, and critical care services. Post-surgical follow-up care is preferentially performed at the site closest to the patient's home.

Since its founding, the program has rapidly grown in volume and has produced outstanding surgical outcomes. We are proud to be able to offer this new and exciting combined program to the children of Virginia. Further information about the program can be found at <http://www.chkd.org/Our-Doctors/Surgical-Specialists/Cardiac-Surgery/>. To refer patients, call UVA at 434-924-9119 or CKHD at 757-668-7214.

Fortify Children's Health, An All-Pediatric Clinically Integrated Network

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The landscape of health care finance is rapidly changing. Every pediatrician will soon face value-based care as a reality. By the year 2020, Medicaid expects that 50 percent of contracts to have a value component. Commercial payors are likely to follow. Are you ready for this shift that moves away from fee-for-service? Are you prepared to negotiate contracts that pay you based on quality metrics and outcomes, across an assigned population of children?

The University of Virginia Children's Hospital and the Children's Hospital of the King's Daughters have come together to create a Clinically Integrated Network (CIN), called Fortify Children's Health (FCH). It is the first pediatric CIN in the Commonwealth, and the first anywhere to form between two children's hospitals. The network unifies pediatric practices with a mission to improve quality, and to be the voice that defines quality in the move toward value-based contracting. FCH is physician-led at every level, including the physician-majority Board of Managers.

The first question we hear from physicians who are new to value-based contracting is always, "Who defines value?" It's an honest question and the right place to begin. The value quotient is broadly defined as: $\text{Value} = \text{Quality} / \text{Cost}$. Anything that increases quality while maintaining cost, or decreasing cost while maintaining quality, will increase value. As one can imagine, defining quality and cost are key to the value quotient. Demonstrating improved value means having the data to demonstrate increased quality and/or decreased costs. To be sure, the definition of value is not so simple in practice. Value can be defined across the total cost of care, which might include care coordination, home nursing, and transportation. Value might focus squarely on reducing costs from blood transfusions, or it might be expanded to include the savings that result from redefining the need for a blood

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transfusion as a quality measure, AND the subsequent cost savings from the avoided morbidity of transfusion reactions.

No matter how you define value, one needs reliable data to make the case. You need data to identify the opportunities for improvement. You need data to track progress and assess outcomes. You need data to motivate change.

A key criterion and resource of a CIN is data integration. Fortify Children's Health is implementing a population health-information technology platform that will pull, organize and analyze data from a variety of EMRs. Using population based data will help guide quality improvement and demonstrate value.



Most pediatric practices would agree that they do a great job of providing care to the patients who come to them. Everyone who makes and keeps an appointment will receive great care. Finding, reminding and following the patients beyond our walls is a challenge, to say the least. Value-based contracting is population health. With value-based contracts, we will be responsible for providing value-based care to a population of patients, including those who are attributed to the practice and have not been to see us for a year or more. The Population Health IT platform will help to manage the population, including those who need outreach and coordination of care.

Fortify is also taking steps toward building the relationships with Managed Care Organizations that will offer value-based contracting. This is a new world of contracting, and the negotiations will require new expertise that includes a clear understanding of what the physician believes will drive quality and guide improved stewardship of resources. Who better to make these choices than the people making the day-to-day decisions of patient care? The clinical and administrative teams on the front lines are best equipped to lead this transformation of care.

Defining quality metrics needs to be a transparent and physician-led process. If we are going to be evaluated and reimbursed for our services based on quality metrics, we need to be in control of defining those metrics, so that they are meaningful and achievable in the current context of patient care. The physician-majority clinical care committee of Fortify is helping to determine what these metrics will be with input from across the network, in a wholly transparent fashion.

Fortify Children's Health includes primary care providers and specialty providers. Data will come from a variety of EMRs, billing data, hospitals, emergency departments, pharmacies, and labs. Everyone in the network will have access to more than 20 registries for primary care and special populations such as sickle cell disease, cystic fibrosis, asthma, and general pediatric wellness. Registry development is on-going, and we propose on-going support for their implementation and utilization.

Fortify Children's Health goes live with its IT platform on July 1, 2019. There are plans in place for increased care coordination, support for quality improvement processes, data analytics, and shared resources. The network is growing and open to new members. For more information contact the co-Chief Medical Officers, Jim Plews-Ogan, M.D., M.S. (jplewsogan@fortifychildrens.org) or Suzanne Brixey, M.D. (sbrixey@fortifychildrens.org).

Dates to Remember!

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For more information and registration go to www.cmevillage.com

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The Mohsen Ziai Pediatric Conference

The Ritz-Carlton Tysons Corner | McLean, VA

November 1 & 2, 2019

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